



Product designation

Rotary cam switches

Product type designation

7GN12

General characteristics

Switching diagram

10 - ON/OFF switch 3 poles

N° of elements

2

Mounting form

U12 - Front mounting without front plate with key operation for hole diam. 22mm fixing

Contact characteristics

Rated insulation voltage U_i

| | | |
|--------|---|-----|
| IEC/EN | V | 690 |
| UL/CSA | V | 600 |

Rated impulse withstand voltage U_{imp}

| | |
|----|---|
| kV | 6 |
|----|---|

Conventional free air thermal current I_{th}

| | | |
|--------|---|----|
| IEC/EN | A | 16 |
| UL/CSA | A | 15 |

Rated operational voltage

| | |
|---|-----|
| V | 480 |
|---|-----|

Rated operational impulse voltage

| | |
|----|---|
| kV | 4 |
|----|---|

Maximum fuse size for short-circuit protection I_n (gG)

| | | |
|------|---|----|
| 10kA | A | 16 |
| 15kA | A | 10 |
| 25kA | A | 10 |

Rated short time current I_{cw}

| | | |
|----|---|-----|
| 1s | A | 200 |
|----|---|-----|

Conductivity

10/5 mA/V

Operational current I_e IEC/EN

AC1/AC21A

| | |
|---|----|
| A | 16 |
|---|----|

AC15

| | | |
|----------|---|-----|
| 110V | A | 10 |
| 220/230V | A | 8 |
| 380/400V | A | 4 |
| 660/690V | A | 1.5 |

Rated operational power in AC

Three-phase AC-3

| | | |
|----------|----|-----|
| 220/230V | kW | 2.5 |
| 380/440V | kW | 4 |
| 500/690V | kW | 5.5 |

Single-phase AC-3

| | | |
|----------|----|-----|
| 110V | kW | 0.8 |
| 220/230V | kW | 1.5 |

| | | | |
|--|----------|-----------------|-------------------|
| | 380/440V | kW | 2.2 |
| Three-phase AC23A | 220/230V | kW | 3 |
| | 380/440V | kW | 5.5 |
| | 500/690V | kW | 7.5 |
| Single-phase AC23A | 110V | kW | 0.8 |
| | 220/230V | kW | 1.7 |
| | 380/440V | kW | 3 |
| Rated operational current in DC | | | |
| DC21A | 48V | A | 12 |
| | 60V | A | 12 |
| | 110V | A | 4 |
| | 220V | A | 0.6 |
| | 440V | A | 0.25 |
| DC23A (poles in series) | 24V | A | 10 (1) |
| | 48V | A | 10 (2) |
| | 60V | A | 10 (3) |
| | 110V | A | 5 (3) |
| | 220V | A | 5 (4) |
| DC13 | 24V | A | 12 |
| | 48V | A | 10 |
| | 60V | A | 8 |
| | 110V | A | 1 |
| | 220V | A | 0.4 |
| | 440V | A | 0.15 |
| Power dissipation | | W | 0.8 |
| Mechanical features | | | |
| Terminals screw | | | M3 |
| Tightening torque for terminals max | | Nm | 0.5 |
| Conductor size | | | |
| AWG - Rigid cable | | | |
| | min | AWG | 20 |
| | Max | AWG | 12 |
| AWG - Flexible cable | | | |
| | min | AWG | 20 |
| | Max | AWG | 14 |
| Conductor size (IEC) - Flexible cable | | | |
| | min | mm ² | 0.5 |
| | Max | mm ² | 2.5 |
| Conductor size (IEC) - Rigid cable | | | |
| | min | mm ² | 0.5 |
| | Max | mm ² | 2.5 |
| Mechanical life | | cycles | 3x10 ⁶ |
| UL technical data | | | |
| Motor power for direct-on-line control | | | |
| for three-phase motor | | | |
| | 120V | HP | 1.5 |
| | 240V | HP | 3 |
| for single-phase motor | | | |
| | 120V | HP | 0.5 |

240V HP 1

Ambient conditions

Temperature

Operating temperature

min °C -25
max °C +55

Storage temperature

min °C -40
max °C +70

Resistance & Protection

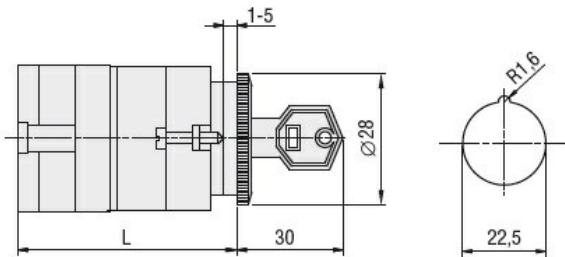
Frontal IP degree

IP40

Terminals IP degree

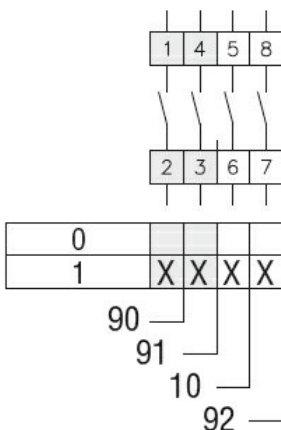
IP00

Dimensions



| Series | L | | | |
|--------|------|------|-------|-------|
| | 1 | 2 | 3...8 | |
| 7GN12 | 47 | 56.7 | 66.4 | 114.9 |
| 7GN20 | 47 | 56.7 | 66.4 | 114.9 |
| 7GN25 | 51.4 | 65 | 78.6 | 146.6 |

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 14
IEC/EN/BS 60947-1
IEC/EN/BS 60947-3
IEC/EN/BS 60947-5-1
UL60947-4-1

Certificates

cCSAus
EAC
UL

ETIM classification

ETIM 8.0

EC001029 -
Selector switch,
complete